In the Claims

1. (cancelled)

2. (cancelled)

3. (cancelled)

4. (cancelled)

5. (cancelled)

6. (cancelled)

7. (cancelled)

8. (cancelled)

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10. (cancelled)

11. (cancelled)

12. (cancelled)

13. (cancelled)

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15. (cancelled)

16. (cancelled)

17. (cancelled)

18. (cancelled)

19. (cancelled)

20. (cancelled)

21. (new) A method for etching a feature in a substrate comprising the steps of:

placing the substrate in a vacuum chamber;

introducing at least one process gas into the vacuum chamber;

generating a high density plasma using a high density plasma source;

subjecting the substrate to a cyclic process;

applying a bias voltage in at least one step of the cyclic process to the substrate;

pulsing the high density plasma source in at least one step of the cyclic process; and

removing the substrate from the vacuum chamber.

22. (new) The method of claim 21 wherein the cyclic process comprises at least one etch step.

23. (new) The method of claim 21 wherein the cyclic process comprises at least one deposition step.

24. (new) The method of claim 21 wherein the bias voltage is D.C.

25. (new) The method of claim 21 wherein the bias voltage is RF.

26. (new) The method of claim 25 wherein the RF bias voltage frequency is less than about 500 kHz.

27. (new) The method of claim 21 wherein the bias voltage is pulsed.

28. (new) The method of claim 27 wherein the RF bias is pulsed in-phase with the pulsing of the high density plasma source.

29. (new) The method of claim 27 wherein the RF bias is pulsed out of phase with the pulsing of the high density plasma source.

30. (new) The method of claim 21 wherein the high density plasma source is an inductively coupled plasma source.

31. (new) The method of claim 22 wherein the high density plasma source is pulsed during the etch step.

32. (new) The method of claim 31 wherein the high density plasma source has a pulse duration of less than the time required for substrate charge to reach steady state.

33. (new) The method of claim 21 wherein the pulsed high density plasma source has a pulse period of less than about 5 ms.

34. (new) The method of claim 21 wherein the pulsed high density plasma source has a pulse period of about 200 μs.

35. (new) The method of claim 21 wherein the pulsed high density plasma source has a duty cycle of less than about 50%.

36. (new) The method of claim 21 wherein the pulsed high density plasma source has a duty cycle of about 10%.

37. (new) The method of claim 21 wherein the substrate contains an insulating layer.

38. (new) The method of claim 37 wherein the high density plasma source is pulsed when said insulating layer is exposed.